



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,082	10/03/2001	Randall B. Smith	5181-80300	9515

7590 12/29/2003

Jeffrey C. Hood  
Conley, Rose & Tayon, P.C.  
P.O. Box 398  
Austin, TX 78767

EXAMINER
----------

CUNNINGHAM, GREGORY F

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/970,082

Applicant(s)

SMITH, RANDALL B.

Examiner

Greg Cunningham

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 31-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 31-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communications of amendment received //2003.
2. The disposition of the claims is as follows: claims 1-15 and 31-44 are pending in the application. Claims 1 and 31 are independent claims. Claims 16-30 have been cancelled.

### ***Drawings***

3. In view of amended drawings, objection is withdrawn.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 2, 5, 9-11, 13, 15, 31-34 and 40-43 are rejected under 35 U.S.C. 102(a) as being disclosed by Smith et al., (US Patent Number 6,476,829), hereafter Smith.

A. Smith discloses claim 1, “A method for rendering and displaying information using a computer graphics system, the method comprising: receiving data corresponding to a plurality of objects to be rendered, wherein the data includes a first data value and a second data value for each object; using the first and second data values for each object to assign each object a first non-positional rendering attribute and a second non-positional rendering attribute; using the first and second non-positional rendering attributes to select a third non-positional rendering attribute; and rendering a scene including at least a subset of the plurality of objects, wherein said

Art Unit: 2676

rendering is performed according the first, second, and third non-positional rendering attributes, and wherein the scene is displayable on a display device” in col. 1, ln. 61 – col. 2, ln. 67.

Wherein “first non-positional rendering attribute and associated first data value” corresponds to [fadedness of the object against a background], “second non-positional rendering attribute and associated second data value” corresponds to [transparency of the object], “third non-positional rendering attribute and associated third data value” corresponds to [size of the object on the display]. Other non-positional rendering attributes eligible as first, second, and third non-positional rendering attribute and associated data value are color, blink rate, jiggle rate, drawing order, line thickness, contrast and etc. as detailed supra for claim 1 in col. 2, lns. 18-67.

B. Smith discloses claim 2, “The method of claim 1, wherein the first non-positional rendering attribute is size” supra for claim 1 and in col. 2, lns. 18-29.

C. Smith discloses claim 5, “The method of claim 1, wherein the first and second non-positional rendering attributes are each one of the following: color saturation, drop shadow, animation” supra for claim 1 and in col. 2, lns. 18-29. Wherein color incorporates saturation i.e. pink and red or blue and royal blue.

D. Smith discloses claim 9, “The method of claim 1, wherein the first non-positional rendering attribute is blink rate” supra for claim 1 and in col. 2, lns. 18-29.

E. Smith discloses claim 10, “The method of claim 1, wherein the first non-positional rendering attribute is background blending level” supra for claim 1 and in col. 2, lns. 18-29.

Wherein “fadedness of the object against a background” corresponds to “background blending level”.

Art Unit: 2676

F. Smith discloses claim 11, “The method of claim 1, wherein the first non-positional rendering attribute is shimmer level” supra for claim 1 and in col. 2, lns. 18-29. Wherein “shimmer level” corresponds to “jiggle rate of the object”.

G. Smith discloses claim 13, “The method of claim 1, further comprising re-rendering a particular object in response to detecting that the corresponding first data value for the particular object has changed, wherein said re-rendering includes updating the first non-positional attribute” supra for claim 1, particularly at “The system maps the mapped attribute to the non-positional display attribute for the object by computing a function of the value of the mapped attribute and the zooming parameter to produce a value for the non-positional display attribute. If the value for the zooming parameter changes in a first direction, the function maps a narrower range of mapped attribute values to prominent display attribute values.”

H. Smith discloses claim 15, “The method of claim 1, further comprising zooming in on a particular object by reconfiguring one or more of the non-positional attributes” supra for claim 1, particularly at “If the value for the zooming parameter changes in a first direction, the function maps a narrower range of mapped attribute values to prominent display attribute values. If the value for the zooming parameter changes in a second direction, the function maps a wider range of mapped attribute values to prominent display attribute values.”

I. Per independent claim 31, this is directed to a system for performing the method of independent claim 1, and therefore is identically rejected to independent claim 1.

J. Per dependent claims 32-34 and 40-43, these are directed to a system, respectively, for performing the method of dependent claims 5, 9-11 and 13, respectively, and therefore are rejected to dependent claims 5, 9-11 and 13.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claims 2 and 31 above, and further in view of Economy et al., (US Patent Number 5,367,615), hereafter Economy.

A. Smith discloses claim 3, “The method of claim 2, wherein the second non-positional rendering attribute is opacity” supra for claim 2. However Smith does not appear to disclose, “wherein the second non-positional rendering attribute is opacity”, but Economy does in col. 1, ln. 46 – col. 2, ln. 8.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with opacity and LOD disclosed by Economy, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 1, lines 56-57.

B. Smith discloses claim 4, “The method of claim 3, wherein the third non-positional rendering attribute is level of detail” supra for claim 3. However Smith does not appear to disclose, “wherein the third non-positional rendering attribute is level of detail”, but Economy does in col. 1, ln. 46 – col. 2, ln. 8.

Art Unit: 2676

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with opacity and LOD disclosed by Economy, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 1, lines 56-57.

C. Per dependent claim 35, this is directed to a system for performing the method of dependent claims 3, and therefore is rejected to dependent claim 3.

D. Smith discloses claim 36, "The computer system of claim 31, wherein the auxiliary rendering attribute is transparency" supra for claim 31. However Smith does not appear to disclose, "wherein the auxiliary rendering attribute is transparency", but Economy does in col. 1, ln. 46 – col. 2, ln. 8.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with opacity and LOD disclosed by Economy, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 1, lines 56-57.

8. Claims 6, 7, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claims 1 and 31 above, and further in view of Hernandez et al., (US Patent Number 4,723,209), hereafter Hernandez.

A. Smith discloses claim 6, "The method of claim 1, wherein the first non-positional rendering attribute is an indicator of whether or not to render text for the object" supra for claim 1. However Smith does not appear to disclose, "wherein the first non-positional rendering

Art Unit: 2676

attribute is an indicator of whether or not to render text for the object”, but Hernandez does in col. 3, lns. 42-50.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with non-text objects disclosed by Hernandez, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 6, ln. 63 – col. 7, ln. 2.

B. Smith discloses claim 7, “The method of claim 1, wherein the first non-positional rendering attribute is font size” supra for claim 1. However Smith does not appear to disclose, “wherein the first non-positional rendering attribute is font size”, but Hernandez does in col. 3, lns. 42-50.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with font size disclosed by Hernandez, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 1, lines 56-57.

C. Per dependent claims 37 and 38, these are directed to a system, respectively, for performing the method of dependent claims 6 and 7, and therefore are rejected to dependent claims 6 and 7.

9. Claims 8, 12 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claims 1 and 31 above, and further in view of Kurihara et al., (US Patent Number 6,072,478), hereafter Kurihara.



Art Unit: 2676

A. Smith discloses claim 8, “The method of claim 1, wherein the first non-positional rendering attribute is sound volume” supra for claim 1. However Smith does not appear to disclose, “wherein the first non-positional rendering attribute is sound volume”, but Kurihara does in col. 16, lns. 55-57.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with sound volume objects disclosed by Kurihara, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 6, ln. 63 – col. 7, ln. 2.

B. Smith discloses claim 12, “The method of claim 1, wherein the objects are virtual objects” supra for claim 1. However Smith does not appear to disclose, “wherein the objects are virtual objects”, but Kurihara does in col. 4, lns. 7-14.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with virtual objects disclosed by Kurihara, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 6, ln. 63 – col. 7, ln. 2.

C. Per dependent claim 39, this is directed to a system for performing the method of dependent claim 8, and therefore are rejected to dependent claim 8.

10. Claims 14 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claims 13 and 43 above, and further in view of Muller et al., (US Patent Number 5,720,018), hereafter Muller.

Art Unit: 2676

A. Smith discloses claim 14, “The method of claim 13, wherein the detecting and re-rendering is performed in real-time” supra for claim 13. However Smith does not appear to disclose, “wherein the detecting and re-rendering is performed in real-time”, but Muller does in col. 14, lns. 10-18.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply attribute size disclosed by Smith in combination with real-time objects disclosed by Muller, and motivated to combine the teachings because it would provide a method and an apparatus that allows a user to zoom on non-positional display attributes as revealed by Smith in col. 6, ln. 63 – col. 7, ln. 2.

B. Per dependent claim 44, this is directed to a system for performing the method of dependent claim 14, and therefore are rejected to dependent claim 14.

### ***Response to Arguments***

11. Applicant's arguments filed 9/29/2003 have been fully considered but they are not persuasive. Claim 1 is disclosed supra as detailed, wherein “first non-positional rendering attribute and associated first data value” corresponds to [fadedness of the object against a background], “second non-positional rendering attribute and associated second data value” corresponds to [a transparency of the object], “third non-positional rendering attribute and associated third data value” corresponds to [a size of the object on the display]. Other non-positional rendering attributes eligible as first, second, and third non-positional rendering attribute and associated data value are color, blink rate, jiggle rate, drawing order, line thickness, contrast and etc. as detailed supra for claim 1 in col. 2, lns. 18-67.

Art Unit: 2676

Likewise, “using the first and second non-positional attributes to select a third non-positional rendering attribute”, wherein first, second and third correspond to brighter (brightness), larger (size) and prominent (fadedness) as particularly disclosed by Smith in col. 2, lns. 33-40. Therefore rejections stand.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Responses***

13. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 872-9314 may be used for formal communications.

Art Unit: 2676

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

*Inquiries*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Cunningham whose telephone number is (703) 308-6109.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached on (703) 308-6829.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

*gfc*

gfc

December 23, 2003

*Matthew C. Bella*

MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600